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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer program product, tangibly embodied on a machine-readable storage device, comprising instructions operable to cause data processing apparatus to:

establish a plurality of checkpoints in a first computer program, the first computer program having a program structure, each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the first computer program; and

assign each checkpoint in the plurality of checkpoints to a checkpoint group without regard to the program structure of the first computer program, ~~wherein the assignment of a given checkpoint to a respective checkpoint group can be made independently of the location of the checkpoint, so that the structure of checkpoint groups is independent of the program structure of the first computer program~~the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint.

2. (Original) The product of claim 1, wherein the checkpoints comprise assertion statements and breakpoint statements.

3. (Previously presented) The product of claim 1, further comprising instructions to:

establish activation variants to enable multiple checkpoint groups to be managed jointly.

4. (Original) The product of claim 1, further comprising instructions to:

receive a control input activating a first checkpoint group; and

activate the checkpoints in the first checkpoint group.

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5. (Previously presented) The product of claim 4, wherein the instructions to receive a control input further comprise instructions to:

       receive a control input that specifies a mode in which checkpoints that are assertions terminate on assertion failure;

       receive a control input that specifies a mode in which checkpoints that are assertions log status on assertion failure; and

       receive a control input that specifies a mode of activating checkpoints in which assertions break in a debugger on assertion failure.

6. (Currently Amended) The product of claim 4, further comprise instructions to:

       receive a control input specifying that activating is to be performed only for a particular user of multiple users using the first computer program, the activating not affecting the use of the first computer program by other users.

7. (Currently Amended) The product of claim 4, further comprise instructions to:

       receive a control input specifying that activating is to be performed only for a particular server of multiple servers on which the first computer program is running.

8. (Cancelled)

9. (Original) The product of claim 8, wherein:

       the checkpoints comprise assertion statements, each assertion statement when activated testing whether a specified assertion condition is true or false; and

       the checkpoints comprise breakpoint statements, each breakpoint statement when activated halting program execution when it is encountered during program execution.

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10. (Currently Amended) The product of claim 8, wherein:

the assertion statements comprise an assertion statement having an argument to activate logging with programmer-controlled granularity, the argument being used to determine whether to update a log entry when the assertion statement fails.

11. (Original) The product of claim 8, further comprising instructions to establish a development environment for developing the first computer program in which the checkpoint groups are development objects.

12. (Original) The product of claim 1, wherein the checkpoints and the first computer program are in a compiled form.

13. (Currently Amended) Apparatus, comprising:

means for establishing a plurality of checkpoints in a computer program, the computer program having a program structure, each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the computer program; and

means for assigning each checkpoint in the plurality of checkpoints to a checkpoint group without regard to the program structure of the computer program, wherein the assignment of a given checkpoint to a respective checkpoint group can be made independently of the location of the checkpoint, so that the structure of checkpoint groups can be independent of the program structure of the first computer program the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint.

14. (Previously presented) The apparatus of claim 13, wherein:

the checkpoints comprise assertions and breakpoints.

15. (Previously presented) The apparatus of claim 13, further comprising:

means for associating an activation variant with a checkpoint group.

16. (Previously presented) The apparatus of claim 13, further comprising:

means for associating an activation variant with a compilation unit.

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17. (Currently Amended) A method, comprising:

       receiving a computer program having a plurality of checkpoints, each checkpoint being assigned to at least one of a plurality of checkpoint groups, each checkpoint and each checkpoint group being identified by a group identifier, ~~the computer program having a program structure, each group identifier identifying checkpoints without limitation as to the location of the checkpoints in the computer program, so that the structure of checkpoint groups is independent of the program structure of the computer program, each checkpoint being an assertion or a breakpoint~~ each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint, the statement including the group identifier identifying the checkpoint group; and

       receiving user input to invoke checkpoints as a group according to their group identifiers.

18. (Previously presented) The method of claim 17, further comprising:

       receiving a user input specifying a mode of invocation of checkpoints; and

       invoking checkpoints according to the specified mode.

19. (Currently Amended) The method of claim 17, further comprising:

       receiving a further user input specifying a scope of invocation of checkpoints, the scope specifying that checkpoints are to be invoked only for a particular user of multiple users using the computer program; and

       invoking checkpoints according to the specified scope.

20. (Currently Amended) The method of claim 17, further comprising:

       receiving a further user input specifying a scope of invocation of checkpoints, the scope specifying that checkpoints are to be invoked only for a particular server of multiple servers on which the computer program is running; and

       invoking checkpoints according to the specified scope.

21. (Cancelled)

22. (Cancelled)

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23. (Cancelled)

24. (Previously presented) The method of claim 17, wherein the computer program has checkpoints including both assertions and breakpoints.

25. (Currently Amended) A method for adding checkpoints to a computer program having source code, the method comprising:

adding to the computer program a plurality of checkpoints each assigned to a checkpoint group by a respective group name for the checkpoint, each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint, the assignment of checkpoints to checkpoint groups being made without regard to the program structure of the computer program.

26. (Previously presented) The method of claim 25, further comprising:

adding the plurality of checkpoints to the source code of the computer program, the respective group name for each checkpoint being included in the source code for the checkpoint; and

transporting the checkpoint groups as development objects with the computer program from a development environment to a production environment, the development objects being objects created and managed by the development environment.

27. (Previously presented) The product of claim 10, wherein:

the argument to activate logging indicates that a log entry is made for each distinct value of a named field.